

Notice of Allowability

Application No.

09/925,740

Examiner

Khiem D. Nguyen

Applicant(s)

YAMAMOTO ET AL.

Art Unit

2823

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the RCE filed on September 19th, 2007.
2. ☒ The allowed claim(s) is/are 5-22 and 30.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

Brook Kebede
BROOK KEBEDE
PRIMARY EXAMINER

K.N.
December 08th, 2007

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on June 07th, 2007 has been entered.

Allowable Subject Matter

2. Claims 5-22 and 30 are allowed over prior art of record.

Reasons For Allowance

3. The following is an examiner's statement of reasons for allowance:

After further search and consideration of Applicants' responses filed on June 07th, 2007 and January 03rd, 2007 (see Applicants' arguments in Page 7 of the June 07th and Page 6 of the January 03rd, responses), it is determined that the prior art of record neither anticipates nor renders obvious the claimed subject matter of the instant application as a whole taken alone or in combination, in particular, prior art of record does not teach "wherein said first copper foil is not recrystallized during said hot pressing, and wherein the second copper foil is recrystallized during said hot pressing", as recited in the independent claim 5, "wherein said first and second copper foils are recrystallized during said hot pressing, wherein said second copper foil is more recrystallized than said first copper foil", as recited in independent claim 11, "wherein said first and second copper

foil contract during said hot pressing, wherein said second copper foil contracts to a larger extent than the first copper foil during said hot pressing”, as recited in independent claim 17, and “said second copper foil is more recrystallizable than the first copper foil at a pressing temperature”, as recited in independent claim 30.

Claims 6-10, 12-16, 18-22 also allowed as being directly or indirectly dependent of the allowed independent base claims.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicants' disclosure.

- Sano et al. (U.S. Patent 6,231,742) disclose a process for the production of an electrolytic copper foil.
- Hatano (U.S. Patent 6,197,433) discloses a method of manufacturing a rolled copper foil for flexible printed circuits.
- Johnston (U.S. Patent 5,153,050) discloses a component for use in manufacturing articles such as printed circuit boards comprising a laminate of a sheet of copper foil and a sheet of aluminum.

5. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

Correspondence

6. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Khiem D. Nguyen whose telephone number is (571) 272-1865. The examiner can normally be reached on Monday-Friday (8:30 AM - 5:30 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew S. Smith can be reached on (571) 272-1907. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

K.N.
December 08th, 2007

Brook Kebede
BROOK KEBEDE
PRIMARY EXAMINER